

APPROVAL SPECIFICATION

Product : Internal Antenna

Model Name : MY25.5

(LTE/Sub-6 MIMO, WIFI, WIFI MIMO Antenna)

Date : 2023. 09. 04.



LS Mtron Co. Ltd.

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1. Manufacturer

- LS Mtron Co. Ltd.
- LS Mtron Part Number: LS01-I-22002-A1

2. Model Name

- Basic Model: MY25.5
- Variation Model: -

3. Antenna Type

- PIFA : Planar Inverted F Antenna

4. Electric Performance Data

4.1 Specification Sheet

4.1.1 LTE/Sub-6 MIMO Antenna (LB+MB+HB+Sub-6)

| | | | | | | | | | | |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Frequency [MHz] | 699 | 716 | 729 | 734 | 746 | 748 | 758 | 791 | 803 | 814 |
| Peak Gain(dBi) | -2.14 | -1.52 | -1.33 | -1.52 | -0.93 | -0.81 | -0.12 | 0.79 | 0.97 | 0.56 |
| Average Gain(dBi) | -5.68 | -5.27 | -4.96 | -5.10 | -4.43 | -4.30 | -3.64 | -3.14 | -2.94 | -3.10 |
| Frequency [MHz] | 824 | 832 | 849 | 859 | 869 | 880 | 894 | 915 | 925 | 960 |
| Peak Gain(dBi) | 0.34 | 0.08 | 0.49 | 0.53 | 0.30 | 0.26 | -0.63 | -0.66 | -0.89 | -1.10 |
| Average Gain(dBi) | -3.25 | -3.45 | -3.12 | -3.29 | -3.64 | -3.77 | -4.75 | -4.92 | -5.12 | -5.73 |
| Frequency [MHz] | 1710 | 1755 | 1785 | 1805 | 1850 | 1880 | 1910 | 1920 | 1930 | 1980 |
| Peak Gain(dBi) | -0.68 | 0.06 | 1.10 | 2.04 | 0.92 | -0.12 | -0.17 | -0.20 | -0.15 | 0.78 |
| Average Gain(dBi) | -4.93 | -4.42 | -3.76 | -2.88 | -3.75 | -4.40 | -4.57 | -4.62 | -4.53 | -3.76 |
| Frequency [MHz] | 1990 | 2110 | 2155 | 2170 | 2300 | 2400 | 2500 | 2570 | 2620 | 2690 |
| Peak Gain(dBi) | 0.79 | 2.06 | 1.96 | 1.94 | 1.91 | 1.24 | 2.27 | 0.48 | 0.21 | -0.12 |
| Average Gain(dBi) | -3.74 | -3.07 | -3.65 | -3.81 | -4.36 | -5.07 | -3.45 | -4.73 | -4.69 | -4.76 |
| Frequency [MHz] | 3300 | 3500 | 3700 | 3900 | 4100 | 4200 | | | | |
| Peak Gain(dBi) | 1.43 | 2.60 | 2.25 | 2.41 | 0.46 | 0.49 | | | | |
| Average Gain(dBi) | -3.49 | -3.17 | -3.12 | -3.49 | -4.59 | -4.52 | | | | |

4.1.2 WIFI Antenna (WIFI)

| | | | | | | | | | | |
|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Frequency [MHz] | 2412 | 2417 | 2422 | 2427 | 2432 | 2437 | 2442 | 2447 | 2452 | 2457 |
| Peak Gain(dBi) | 2.88 | 2.75 | 2.61 | 2.78 | 2.74 | 2.63 | 2.76 | 2.35 | 2.24 | 2.12 |
| Average Gain(dBi) | -1.64 | -1.67 | -1.73 | -1.87 | -1.85 | -1.90 | -1.69 | -1.82 | -1.85 | -1.83 |
| Frequency [MHz] | 2462 | 2467 | 2472 | | | | | | | |
| Peak Gain(dBi) | 2.20 | 2.38 | 2.73 | | | | | | | |
| Average Gain(dBi) | -1.77 | -1.86 | -1.77 | | | | | | | |

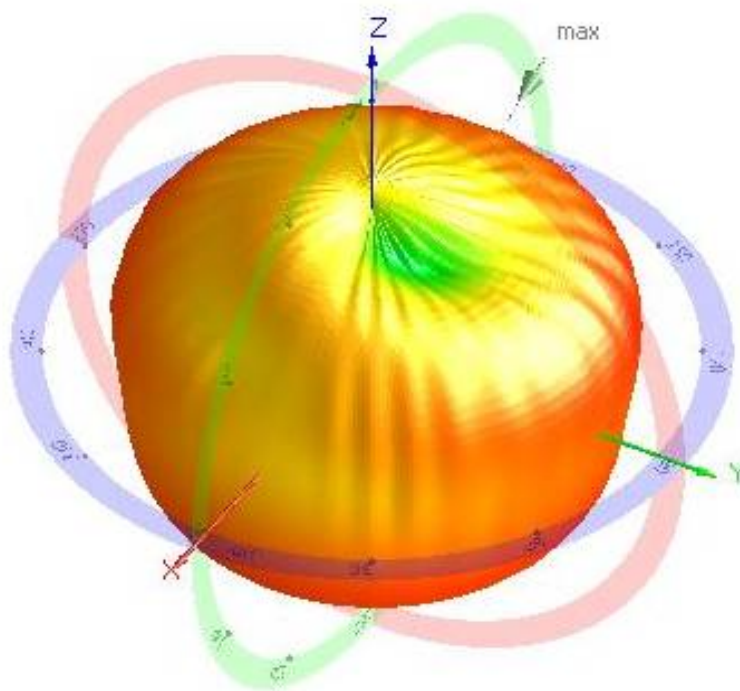
4.1.3 WIFI MIMO Antenna (WIFI)

| | | | | | | | | | | |
|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Frequency [MHz] | 2412 | 2417 | 2422 | 2427 | 2432 | 2437 | 2442 | 2447 | 2452 | 2457 |
| Peak Gain(dBi) | 2.82 | 2.80 | 2.70 | 2.61 | 2.57 | 2.53 | 2.77 | 2.48 | 2.50 | 2.36 |
| Average Gain(dBi) | -1.82 | -1.84 | -1.81 | -1.88 | -1.91 | -1.91 | -1.80 | -1.78 | -1.76 | -1.89 |
| Frequency [MHz] | 2462 | 2467 | 2472 | | | | | | | |
| Peak Gain(dBi) | 2.44 | 2.59 | 2.94 | | | | | | | |
| Average Gain(dBi) | -1.78 | -1.88 | -1.47 | | | | | | | |

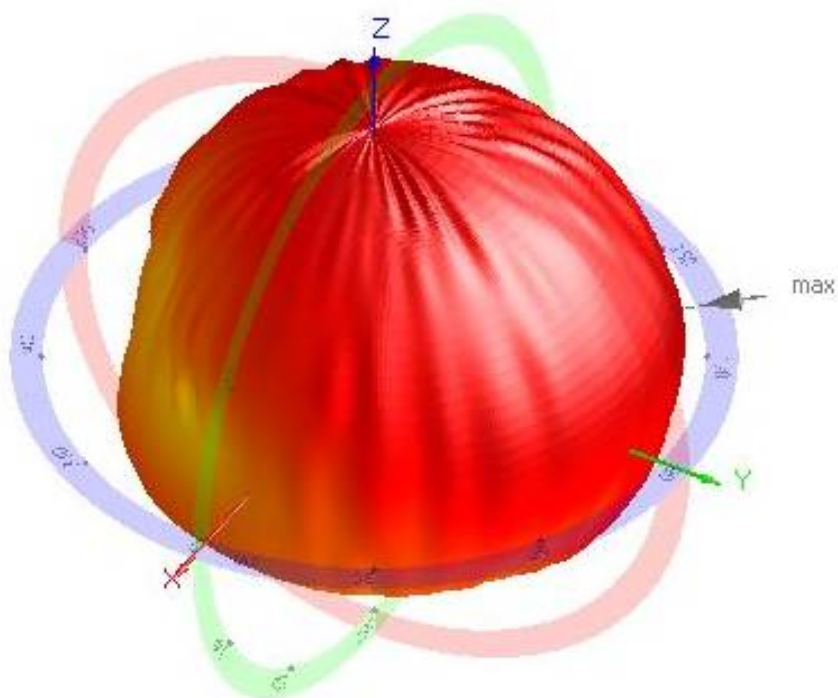
4.2 3D Radiation Pattern

4.2.1 LTE / Sub-6 MIMO Antenna (LB+MB+HB+Sub-6)

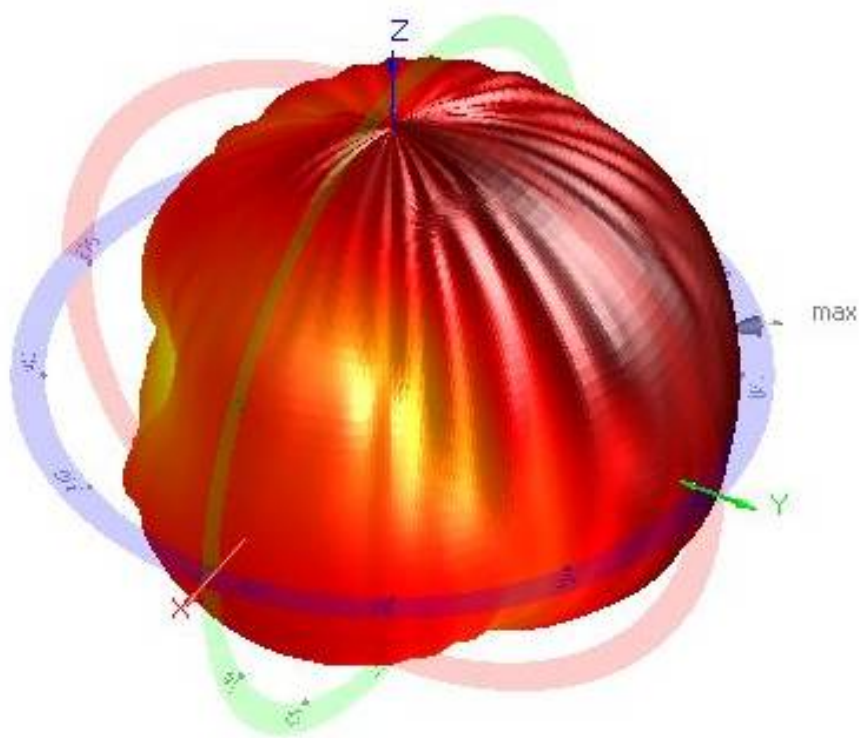
4.2.1.1 LTE LB MIMO (B5/12/17)



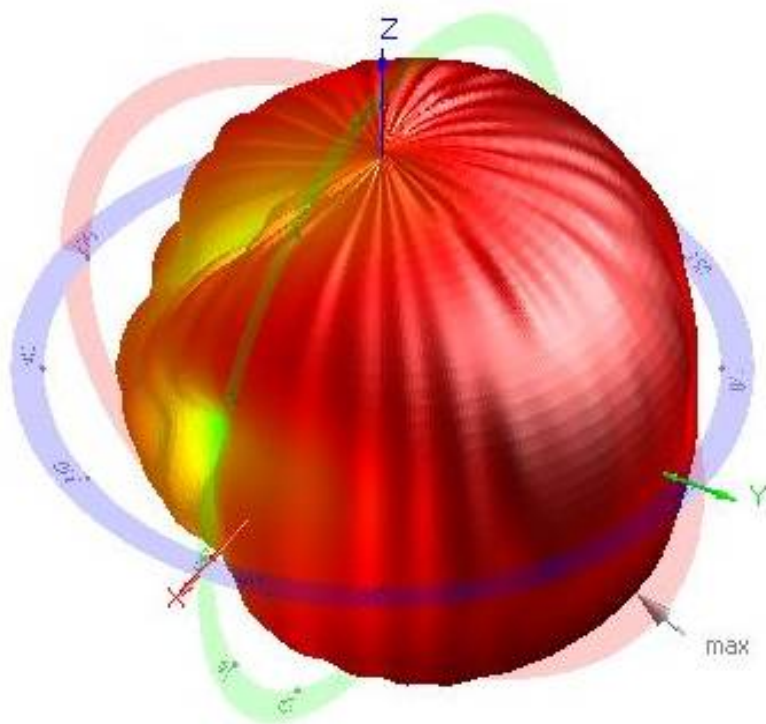
4.2.1.2 LTE MB MIMO (B2/4/66)



4.2.1.3 LTE HB MIMO (B7)

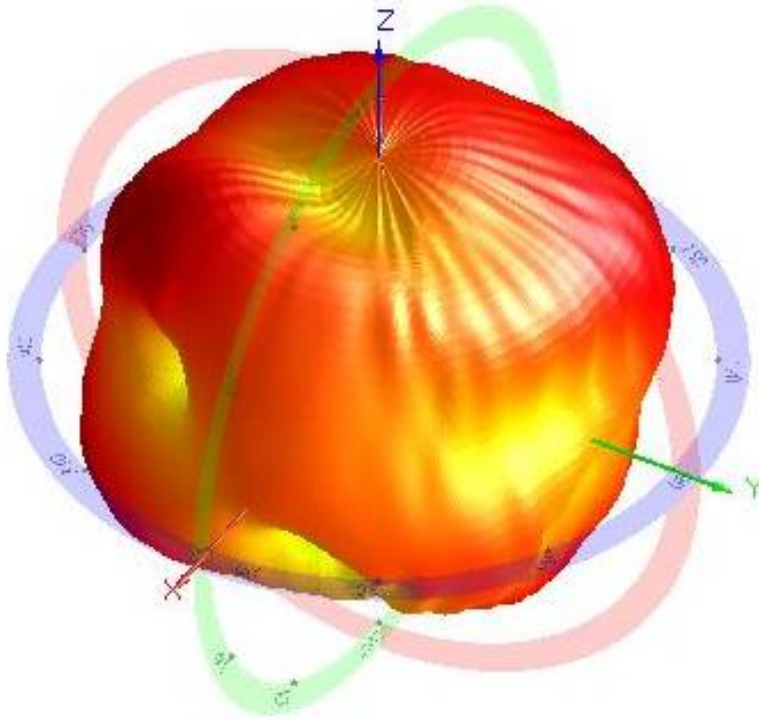


4.2.1.4 Sub-6 MIMO (n77)



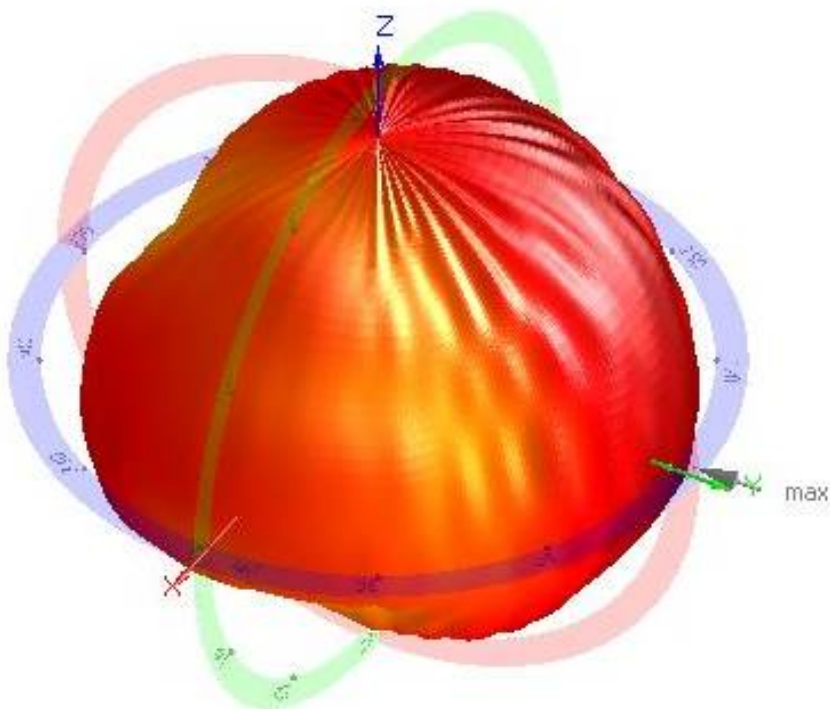
4.2.2 WIFI Antenna (BT/WiFi 2.4GHz)

4.2.2.1 BT/WIFI 2.4G



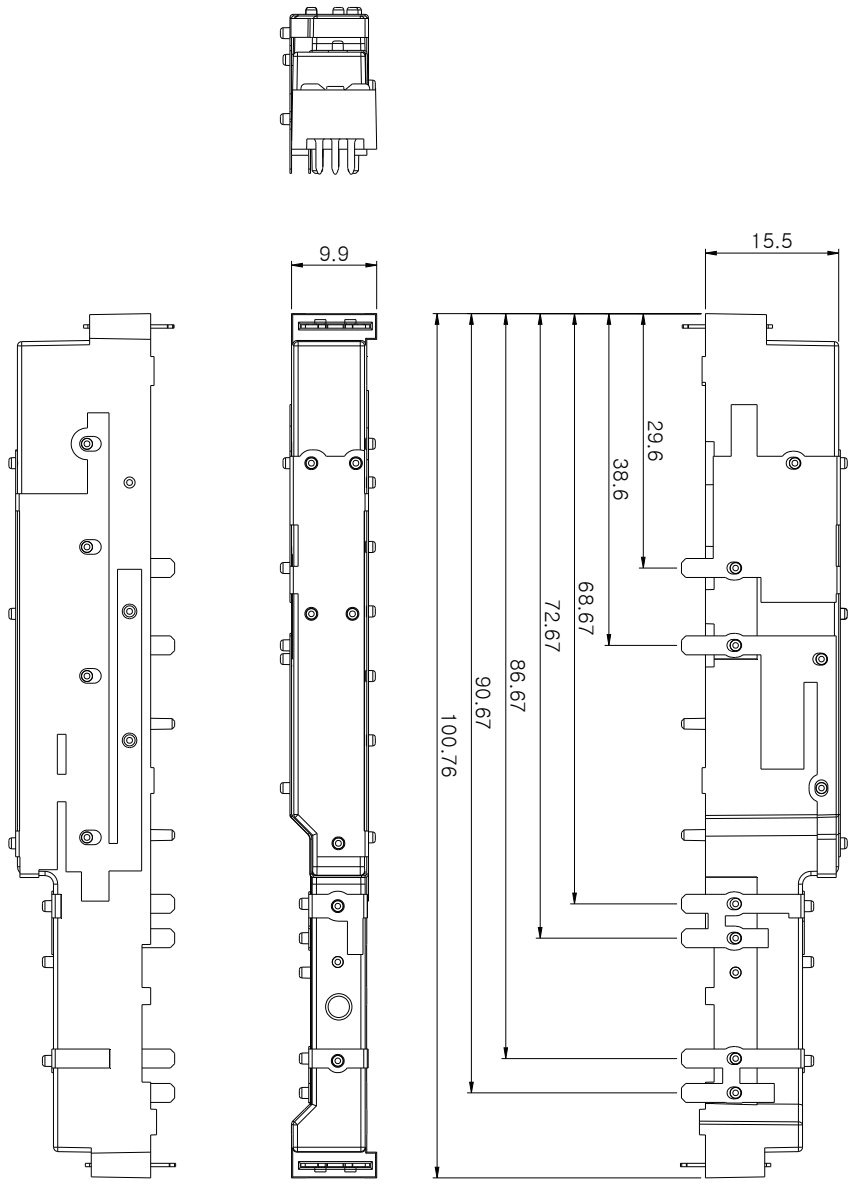
4.2.3 WIFI MIMO Antenna (BT/WiFi 2.4GHz)

4.2.3.1 BT/WIFI MIMO 2.4G



5. External Drawing

5E



| DESIGNED | CHECKED | APPROVAL |
|------------------|------------|------------------------------|
| LYS | YSH | KSJ |
| 2023.08.16 | 2023.08.16 | 2023.08.16 |
| METRIC A3 | 1:1 | SCALE |
| mm | UNIT | 1/1 |
| | SHEET | |
| | | THIRD ANGLE DIMENSION |